# DUIBACS LAWS

# LEARN ALCOHOL BASICS

Information for ADULTS 21 AND OLDER

Virginia Department of Alcoholic Beverage Control Education and Prevention Publication Series



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### INTRODUCTION

Individuals 21 and older have a high risk of problem drinking. If you choose to drink, it is important that you do so responsibly and in moderation. This publication includes information that will assist you with making healthier choices.

## BLOOD ALCOHOL **ONCENTRATION** BAC)?

Whether it's one drink or many, alcohol can affect people in different ways. The way a person reacts to alcohol depends on many factors including gender, weight and rate of alcohol consumption. All of these factors influence a person's blood alcohol concentration (BAC).

BAC is the amount of alcohol that is present in the bloodstream. For example, having a BAC of .10 percent means there is about one drop of alcohol for every 1.000 drops of blood present in the body. At certain BAC levels, alcohol has been shown to alter a person's visual functions and perceptions, affecting the ability to react, concentrate or pay attention, process information and operate a vehicle. The measurement of BAC is important for determining the role alcohol plays in car crashes, physical injuries, fires, crimes. family violence, suicides and other forms of injury.



### HOW IS BLOOD ALCOHOL CONCENTRATION MEASURED? method used by law enforcement agencies.

BAC can be measured by breath, blood or urine tests. Breathalyzers are the primary

### MYTH:

### IF I NEED TO SOBER UP QUICKLY, I CAN.



There is nothing you can do to quickly eliminate alcohol from your body. It is important to be mindful of what you are drinking and understand how alcohol impacts your body. Know your limits and make responsible choices to avoid dangerous situations.

## WHAT AFFECTS YOUR BAC LEVEL?



### STRENGTH OF DRINK

Drinks can have different effects based on their composition. Mixing a drink with a carbonated soda, for example, will quicken the effects of the alcohol due to the carbonation.

### RATE OF CONSUMPTION

Taking shots or chugging drinks will increase the amount of alcohol absorbed within a certain time period. The liver metabolizes alcohol at the average rate of one drink (12 oz. beer, 5 oz. wine, 1.5 oz. of 80 proof distilled liquor) per hour. If a person consumes more than one drink per hour, the remaining alcohol will circulate in the bloodstream until the liver is able to metabolize all of it.





### **BODY SIZE/WEIGHT**

People who weigh less will generally be affected faster by alcohol than people who carry more weight. This is because people with a greater body weight have more blood and water in their bodies, which assists in the dilution of alcohol.

### **FOOD**

A full stomach slows the absorption of alcohol into the bloodstream. Drinking on an empty stomach, however, will cause the BAC to rise more rapidly without food to assist in absorption.





### **GENDER**

Women tend to reach a higher BAC faster because they have a greater fat-to-muscle ratio than men. Fat repels alcohol, whereas muscle absorbs it. Therefore, it generally takes less alcohol for a woman to show signs of its effects since women are typically smaller and have less muscle to absorb the alcohol.

### DRUG USE

The presence of other legal or illegal drugs in a person's body can increase the effects of alcohol and may cause an unpredictable and dangerous outcome.



### DO YOU KNOW HOW MUCH YOU ARE DRINKING?



Not all drinks are created equal! For example, a Long Island Iced Tea includes multiple shots of alcohol that could equal up to three drinks. Keep in mind that one shot of 80 proof liquor, one standard glass of wine and one standard beer all contain approximately the same amount of alcohol. Some wines and beers contain a higher percentage of alcohol than others.

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Drunk driving occurs when a person who is intoxicated gets behind the wheel of a vehicle. You do not have to be drunk to be considered impaired or under the influence of alcohol. Impairment can begin with the first drink. Driving skills and abilities, such as judgment, reaction time and motor coordination are impaired in most people long before they exhibit visible signs of drunkenness.

The Commonwealth of Virginia defines the legal limit for driving while intoxicated at a BAC of .08 percent for those 21 years of age or older. Violators of the above are guilty of a Class 1 misdemeanor and, upon conviction, face a fine of up to \$2,500, a year in jail, and/or 50 hours of community service. Violators may also lose their driver's license for up to one year.





Virginia's Zero Tolerance Law makes driving under the influence of any amount of alcohol a serious criminal offense for drivers younger than 21.

# **%**

### MYTH:

### BEER BEFORE LIQUOR, NEVER BEEN SICKER!

The order in which you consume alcohol does not impact the effects on your body and its recovery. Be mindful of what a standard-sized drink is and monitor the amount of alcohol you consume.

# SE BINGE DRINKING?

Binge drinking is the rapid and heavy consumption of alcohol and is highest among 18 to 25 year olds. Binge drinking occurs when a woman consumes four or more drinks or a man consumes five or more drinks during a short period of time. If you are participating in drinking games, it's very difficult to keep track of the amount of alcohol you consume. Alcohol poisoning happens when a large amount of alcohol is consumed, resulting in







a high BAC. According to the Centers for Disease Control and Prevention, about 75 percent of alcohol poisoning deaths occur in people ages 35 to 64. It is important to make responsible and healthy choices as drinking in large amounts can lead to brain damage, liver damage and alcohol poisoning.

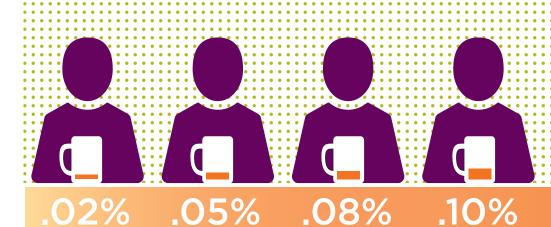
### **MYTH:**

### "BREAKING THE SEAL MAKES ME LOSE MY BUZZ."



Some people may think that frequent bathroom trips are a sign that they are eliminating the alcohol they have been drinking from their body. The truth is that alcohol affects the absorption of water in your kidneys, causing these frequent bathroom trips. Most importantly, this does not change the level of alcohol in your bloodstream!

### **HOW CAN ALCOHOL AFFECT MY BODY?**



- Relaxation
- · Loss of inhibitions
- Mild intensification of existing mood
- Lightheadedness
- May impair your ability to drive

- Mild euphoria
- Emotions and behavior become exaggerated
- Deficits in fine motor skills
- Delayed reaction time
- Lack of recognition of these deficits

- Motor skills impaired
- Mild speech impairment
- Balance is affected
- Sight and hearing are reduced
- Impaired judgment such that one's ability to evaluate or respond to sexual situations is impaired
- Recognition of cognitive motor deficits is lost
- ➤ Virginia defines the legal limit for driving while intoxicated at a BAC of .08 percent for those 21 years of age or older

- Lack of coordination and balance
- Memory and judgment are severely impaired
- Recognition of impairment is lost
- Emotions are exaggerated to the extreme point of belligerence in some cases



- Significant impairment of all mental and physical functions with deficits in judgment
- Feeling as if one is in a stupor
- Blackouts (drug induced amnesia)
- Higher risk of accidental injury to self and others
- Significant loss of control over behavior

- Confusion
- Difficulty standing upright
- Movement requires assistance from others
- Physical harm to self often goes unnoticed or is ignored
- Vomiting may occur or gag reflex is affected with increased risk of asphyxiation from choking on vomit

- In a trance-like state
- Unconsciousness (passed out)
- Difficultly in becoming aroused
- ➤ This is equivalent to the level of surgical anesthesia

- Comatose
- ► Extremely high likelihood of death due to respiratory or cardiac failure

### **HOW CAN I ESTIMATE MY BAC LEVEL?**

To estimate what your BAC would be after a certain number of drinks, use the table below that is specific to your gender. Find your approximate weight on the chart for a better estimate. Keep in mind that each box represents a **standard-size drink**.



### APPROXIMATE BAC FOR MEN

Your Weight in Pounds	100	120	140	160	180	200	220	240	260	280
1 drink	.04	.03	.03	.02	.02	.02	.02	.02	.01	.01
2 drinks	.08	.06	.05	.05	.04	.04	.03	.03	.02	.02
3 drinks	.11	.09	.08	.07	.06	.06	.05	.05	.04	.04
4 drinks	.15	.12	.11	.09	.08	.08	.07	.06	.06	.05
5 drinks	.19	.16	.13	.12	.11	.09	.09	.08	.08	.07
6 drinks	.23	.19	.16	.14	.13	.11	.10	.09	.09	.09
7 drinks	.26	.22	.19	.16	.15	.13	.12	.11	.11	.10
8 drinks	.30	.25	.21	.19	.17	.15	.14	.13	.13	.12
9 drinks	.34	.28	.24	.21	.19	.17	.15	.14	.15	.14
10 drinks	.38	.31	.27	.23	.21	.19	.17	.16	.16	.15



### FOR **EXAMPLE**:

If a man weighing 140 pounds has three standard-sized drinks, his BAC will equal approximately .08 percent

### **HOW CAN I ESTIMATE MY BAC LEVEL?**

Gender is one of the many factors that impacts BAC levels. Alcohol affects men and women differently. Virginia sets the legal limit for driving while intoxicated at a BAC of .08 percent for those 21 years of age and older.



### APPROXIMATE BAC FOR **WOMEN**

Your Weight in Pounds	90	100	120	140	160	180	200	220	240
1 drink	.05	.05	.04	.03	.03	.03	.02	.02	.02
2 drinks	.10	.09	.08	.07	.06	.05	.05	.04	.04
3 drinks	.15	.14	.11	.10	.09	.08	.07	.06	.06
4 drinks	.20	.18	.15	.13	.11	.10	.09	.08	.08
5 drinks	.25	.23	.19	.16	.14	.13	.11	.10	.09
6 drinks	.30	.27	.23	.19	.17	.15	.14	.12	.11
7 drinks	.35	.32	.27	.23	.20	.18	.16	.14	.13
8 drinks	.40	.36	.30	.26	.23	.20	.18	.17	.15
9 drinks	.45	.41	.34	.29	.26	.23	.20	.19	.17
10 drinks	.51	.45	.38	.32	.28	.25	.23	.21	.19



### FOR **EXAMPLE**:

If a woman weighing 120 pounds has four standard-sized drinks, her BAC will equal approximately .15 percent. Driving at this BAC level is illegal. This scenario is also an example of binge drinking.

# HOW LONG DOES IT TAKETO ELIMINATE ALCOHOL FROM MY BODY?

Use the tables below to calculate the approximate time that it takes to eliminate the alcohol content of one or more drinks by selecting your gender and approximate weight in pounds.



### HOURS TO ZERO BAC FOR MEN

Your Weight in Pounds	100	120	140	160	180	200	220	240
1 drink	2.5	2	2	2	1.5	1	1	1
2 drinks	5	4	3.5	3	3	2.5	2	2
3 drinks	7	6	5	4.4	4	3.5	3.5	3
4 drinks	9.5	8	7	6	5.5	5	4.5	4
5 drinks	12	10	8.5	7.5	6.5	6	5.5	5
6 drinks	14	12	10	9	8	7	6.5	6
7 drinks	17	14	12	10.5	9	8	8	7
8 drinks	19	16	13.5	12	10	9	9	8
9 drinks	21.5	18	15	13.5	11.5	10.5	10	9
10 drinks	23	19	16	14	12.5	11	11	9.5

### FOR **EXAMPLE**:

If a 180-pound man has four standard-sized drinks, which equal a BAC of approximately .08 percent, it will take approximately five and a half hours for his BAC level to return to zero. It is dangerous and illegal for him to drive during that time as Virginia defines the legal limit for driving while intoxicated at a BAC of .08 percent for those 21 years of age and older.

# HOW LONG DOES IT TAKETO ELIMINATE ALCOHOL FROM MY BODY?

Sobering up quickly with a cold shower, exercise, eating a large meal or drinking coffee is a myth! In fact, you can only reduce the amount of alcohol in your bloodstream as time passes.



### HOURS TO ZERO BAC FOR WOMEN

Your Weight in Pounds	100	120	140	160	180	200	220	240
1 drink	3	2.5	2	2	1.5	1.5	1.5	1
2 drinks	6	5	4	3.5	3	3	2.5	1.5
3 drinks	9	7	6.5	5.5	5	4.5	5	3.5
4 drinks	12	9.5	8.5	7	7	5.5	5	4.5
5 drinks	14.2	12	10.5	9	8	7	6.5	6
6 drinks	17.5	14	12.5	11	9.5	8.5	7.5	7
7 drinks	20	17	14.5	12.5	11.5	10	9	8
8 drinks	23	19	16.5	14.5	13	11.5	10.5	9.5
9 drinks	26	21.5	18.5	16	14.5	13	11.5	10.5
10 drinks	28	26	20	17.5	16	14	12.5	11

### FOR **EXAMPLE**:

If a 120-pound woman has four standard-sized drinks, which equal a BAC of approximately .15 percent, it will take approximately nine and a half hours for her BAC level to return to zero. It is dangerous and illegal for her to drive during that time.

# RESPONSIBLE PARTY HOSTING TIPS

Whether planning a small private gathering or a large charity event, party hosts are responsible for making sure the event is fun and safe. The best way to do this is through careful planning. If you are serving alcoholic beverages at your party, here are some tips to keep your guests safe:



Selling or serving to an underage person is considered a serious Virginia ABC violation and is against the law. Don't allow anyone younger than 21 to purchase or consume alcoholic beverages at your event.



Put yourself in the mind of a non-drinker. Don't force drinks on your guests or rush to refill their glasses right away. Some guests may accept drinks they don't want in order to avoid appearing rude.



Always serve food, especially high-protein foods such as cheese and meats that stay in the stomach longer and slow down the absorption of alcohol into the bloodstream. Although food causes alcohol to be absorbed more slowly, it has no effect on how long it takes for alcohol to leave your system!



Don't mix alcohol with drugs. Both legal and illegal drugs may result in dangerous interactions with alcohol.



Be aware that mixing alcohol with carbonated beverages accelerates the effects of alcohol in the body.



Always have non-alcoholic drinks, such as juices, water or tea available for guests. Encourage your guests to keep track of what they are drinking and to alternate between non-alcoholic drinks, water and high-protein snacks.



Stop serving alcohol two hours before the party ends but continue serving non-alcoholic drinks and food. For most people, this two-hour wait will not be enough time to clear all of the alcohol from their bodies, so be sure to find safe rides home via taxis or non-drinking designated drivers.



Don't let people drink and drive! Car-pooling and cabs can save lives. It's the responsibility of everyone (especially the host of the party) to stop drinkers from driving. If necessary, take away their car keys and invite guests to spend the night.

REMEMBER: Friends don't let friends drink and drive!



Have one-ounce bottle spouts at the bar to measure alcohol for mixed drinks.

Making a mixed drink without accurately measuring the amount of alcohol being served can lead to alcohol poisoning and excessive drinking.



Be careful who you invite. If you invite good friends who are mature social drinkers, you shouldn't have a problem hosting a safe and fun party. Inviting strangers or people who are not responsible around alcohol is certain to cause trouble.



Know the signs of alcohol poisoning and be prepared to call 911 if anyone presents the following symptoms:

- Confusion
- Slow or no reflexes or response
- Difficulty or inability to remain conscious
- Vomiting
- · Trouble breathing
- Clammy, pale or bluish lips
- Seizures

### MOCKTAILS AND EASY RECIPES



### **Mock Pink Champagne**

16-oz. can frozen grapefruit juice
1 cup water
1 28-oz. bottle chilled ginger ale
16-oz. can frozen orange juice
1/3 cup grenadine syrup
Combine all ingredients. Makes 10 servings.

#### **Crock Pot Wassail Punch**

2 cups cranberry juice cocktail 1 orange studded with whole cloves 2 quarts apple cider 2 three-inch cinnamon sticks 1/2 cup sugar, (optional)

Combine all ingredients in a crock pot and simmer for about one hour on high or two hours or more on low. Serve in warmed mugs, garnished with orange slices or extra cinnamon sticks. Makes 10 servings.

### Sangria

4 oz. orange juice
4 oz. cranberry juice
2 slices each of lime, lemon, orange
4-6 fresh cranberries (optional)
Crushed or cubed ice
1 bottle sparkling apple cider

Place orange juice, cranberry juice and fruit slices into a pitcher. Add ice and pour whole bottle of sparkling apple cider over the rest of the ingredients. Stir with a spoon and serve in wine glasses. Makes four servings.

#### **Citrus Collins**

2 oz. fresh-squeezed orange or grapefruit juice 1 oz. simple syrup 1 oz. fresh-squeezed lemon juice Club soda

Fill a 12 oz. glass with ice cubes. In another glass, combine orange/grapefruit juice, lemon juice, and simple syrup. Pour over ice. Top off with club soda. Garnish with orange slice and cherry. Makes one drink.

### **Tomato Bull**

Lemon & lime wedges Salt, ice cubes Bloody Mary mix Celery sticks

Salt the rim of a 10 oz. glass. Fill with ice cubes. Squeeze the juice of a lemon and lime wedge into the glass. Top off with Bloody Mary mix. Garnish with a celery stick. Makes one drink.

Plan your party or event so that the focus is on something other than drinking alcoholic beverages. Try the following recipes for non-alcoholic drinks and party food high in protein to slow down the absorption of alcohol in your bloodstream.



### **Barbecued Chicken Wings**

20 chicken wings 1 tablespoon vinegar 1/4 cup soy sauce 1/4 teaspoon ginger 1/4 cup honey

Mix all ingredients except chicken in a twoquart bowl. Add chicken wings and marinate overnight. Place wings on a baking sheet sprayed with cooking spray. Bake at 400° F for 1/2 hour. Turn chicken occasionally during baking.



#### Fresh Fruit & Cheese Kabobs

18-oz. pkg. cream cheese
1/3 cup finely chopped nuts
1/4 cup crumbled blue cheese
2 fresh oranges/tangerines, peeled, segmented
1 grated orange peel
2 bananas, cut in chunks
1 apple, cored, sliced
1/2 cup grapes

Combine cheeses and orange peel. Form into sixteen 1-inch balls; roll in chopped nuts. Chill 30 minutes until firm. To serve, on 6-inch wooden skewers arrange one cheese ball and an assortment of fruit. Makes 16 appetizers.

### **Mexican Layer Dip**

2 8-oz. pkgs. cream cheese 1 pkg. dry taco seasoning 2 tablespoons milk 1 tablespoon salsa 2 teaspoons chili powder 1 can refried beans

1 cup each of shredded lettuce, chopped green onions, chopped tomato, shredded cheese and tortilla chips

Mix together the first five ingredients. Spread mixture on serving tray. Top with remaining ingredients. Chill and serve with tortilla chips.

# Am I At Risk of an **ALCOHOL USE DISORDER**



An alcohol use disorder (AUD), or alcoholism, is when drinking starts to become a problem to the individual and those around them. It is important to recognize if you display any symptoms of an AUD and to immediately seek help.

### To assess whether you or a loved one may have an AUD, here are some questions to ask.

In the past year, have you:
☐ Had times when you ended up drinking more, or longer than you intended?
☐ More than once wanted to cut down or stop drinking, or tried to, but couldn't?
□ Spent a lot of time drinking, or being sick or getting over the aftereffects?
□ Experienced craving — a strong need, or urge to drink?
☐ Found that drinking — or being sick from drinking — often interfered with taking care of your home or family? Or caused job troubles? Or school problems?
□ Continued to drink even though it was causing trouble with your family or friends?
☐ Gave up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?
☐ More than once gotten into situations while/after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?
☐ Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?
☐ Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?
☐ Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such as trouble sleeping, shakiness, irritability, anxiety, depression, restlessness, nausea, or sweating? Or sensed things that were not there?

If you answered yes to one or more of these questions, consult your doctor or health care provider.

# HOW CAN I BE A RESPONSIBLE DRINKER?



Keep track of how much you drink.



Know what a standard drink size is so that you can accurately count your drinks.



Pace yourself and don't consume more than one standard drink every hour. Alternate between a non-alcoholic beverage, water and food.



Don't drink on an empty stomach. Eat foods high in protein before, during and after you drink.



Engage in healthy activities that don't include drinking alcohol. Don't rely on alcohol to make a social situation more comfortable or fun or to deal with a sudden loss. Focus on having as much fun without drinking as you do when you are!



Be aware of urges to drink. Don't use having a good or bad day as an excuse for drinking excessively.



Know how to say "no" when you are offered a drink but don't want one.



Be responsible for yourself and those around you. Lock up your alcohol and don't provide it to individuals younger than 21.



Never drink and drive!



There is no known safe amount of alcohol use during pregnancy. The best practice is to not drink alcohol while pregnant as it can hurt your baby's brain, heart, kidneys and other organs.

### MYTH:

#### "PASSING OUT AFTER I DRINK ISN'T A BIG DEAL."

Passing out after drinking could be a sign of alcohol poisoning. Binge drinking, or drinking more than four drinks at one time, can increase the likelihood of a drinker to experience alcohol poisoning. A large volume of alcohol in the bloodstream causes the body, and its major functioning organs such as the brain, to consequently shut down.



### **RESOURCES**

### The Foundation for Advancing Alcohol Responsibility (www.responsibility.org)

The Foundation for Advancing Alcohol Responsibility leads the fight to eliminate drunk driving and underage drinking and promotes responsible decision—making regarding alcoholic beverages.

### National Institute on Alcohol Abuse and Alcoholism (www.niaaa.nih.gov)

NIAAA supports and conducts research on the impact of alcohol use on human health and well-being. It is the largest funder of alcohol research in the world.

### Virginia ABC Education and Prevention Resources

The Virginia ABC Education and Prevention Section provides programming and resources for all age groups. Please call or visit us online for more information.

Phone: 804-977-7440

E-mail: education@abc.virginia.gov

Web: www.abc.virginia.gov

Facebook.com/VirginiaABCEducationAndPrevention

### **Miss Virginia School Tour**

In partnership with Virginia ABC, Miss Virginia travels across Virginia to elementary schools spreading a message of health, wellness and prevention with students and teachers.

### Being Outstanding Leaders Together (BOLT) Against Drugs and Alcohol

Provides drug and alcohol prevention knowledge to middle school students through regional community collaboration and high school peer leadership.

### **Project Sticker Shock**

Supplies are provided to community groups in an effort to decrease social providing. The project includes stickers being placed on alcohol packaging reminding buyers to not provide to minors and is done in conjunction with a press event to help raise awareness.

### Youth Alcohol and Drug Abuse Prevention Project (YADAPP)

A high school youth-led leadership conference equipping teens with a strategic plan and empowering them to keep their schools and communities alcohol and drug free.

### **College Tour**

A multi-stop conference that focuses on promoting zero tolerance for underage drinking, social responsibility, collaboration and leadership on college and university campuses across Virginia.

### **Responsible Sellers & Servers: Virginia's Program (RSVP)**

### Managers' Alcohol Responsibility Training (MART)

Trainings are held regionally and conducted by ABC special agents to help businesses that sell alcohol become more responsible and to better understand Virginia laws, rules and regulations.

### **Alcohol and Aging Awareness Group (AAAG)**

A statewide affiliate group that provides education, training and resources to prevent the misuse of alcohol and medications as adults age.

### **Virginia Office for Substance Abuse Prevention (VOSAP)**

An organization that promotes collaboration among state and local agencies, organizations, coalitions and faith communities that address substance abuse prevention.

#### **Educational Materials**

Brochures, posters, training DVDs and public service announcements are available to the general public at no cost.

### **Grant Program**

Alcohol education and prevention grants assist community partners to develop and enhance initiatives related to alcohol education and prevention. Grant cycle is July through June with applications due in the spring.



Virginia Department of Alcoholic Beverage Control www.abc.virginia.gov • (804) 977-7440 2901 Hermitage Road • Richmond, VA 23220

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